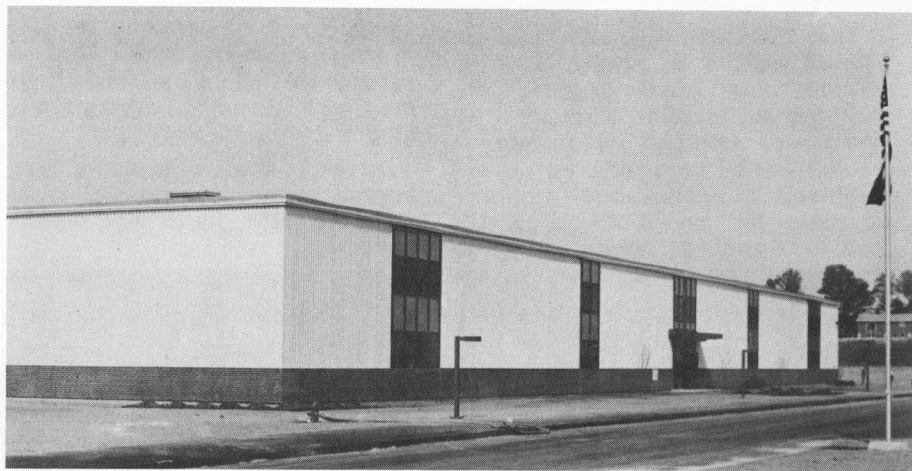


INTERFACE

June — Vol 1. No. 7

1975



Interface Background Report

Maine Plant Needed For Future Growth — NOT To Replace Facilities

Despite statements last year that a new facility planned for Maine should not affect employment in Southboro, some questions have been asked by Data General employees.

"This probably occurs because business, though good, has not been growing at the rate it did when many of us first joined Data General," notes Jim Millar, director of Industrial Relations.

Compared to the rest of the economy, business has been good at Southboro. Hiring has continued throughout the year for both exempt and non-exempt personnel.

Future

Data General must be ready to move forward rapidly when the opportunities develop and demand increases. The new facility at Westbrook, Maine will provide some relief from overcrowded conditions that exist at Southboro. And even Maine might not be enough! The company is constantly looking at sites. Land in nearby Westbrook was considered last winter, although negotiations fell through.

"We continue to look at sites in Massachusetts and elsewhere," states Larry Donovan, director of property management. "It is all in line with planning for long-term growth and based on a continued strong operation at corporate headquarters in Southboro."

Reasoning

But why not do all our necessary expansions in one spot? There are definite limitations.

"Our present Southboro site is not the best available for expansion," said Larry. "We can't really expand facilities at this location."

In searching for areas for expansion, Data General must also consider the availability of people. "While unemployment may be high now, just a year ago we were unable to meet our demands for people in the Southboro area," noted Jim Millar. "And even today, a number of jobs in Southboro remain unfilled. We are actively recruiting in manufacturing, clerical, engineering and other areas."

No matter how you look at it, the answer is that Data General needs room to grow and plans to expand both in the Southboro area and other field locations.

Vote Of Support In Maine

Citizens of Westbrook, Maine approved a \$4.6 million industrial revenue bond referendum on June 10 to allow financing at favorable interest rates of Data General's new plant. The 1686 to 50 vote placed no financial obligation on the city.

The referendum provided an opportunity for Data General to introduce itself to the community and outline its plans for the Maine facility.

Plant manager Dan Nigro explained that build-up to an expanded work force would be

gradual depending on the growth of Data General's total business. With its current small workforce, the Westbrook plant recently completed its first totally assembled central processing units for final test and assembly. Plans call for assembly of more CPUs as well as some peripheral equipment in the future.

The 134,000 square foot plant is located on a 56-acre tract of land in an industrial park in Westbrook, a community of 15,000 just outside Portland.

Meet Data General's Youngest Shareowners

This spring in Massachusetts' schools the events of 200 years ago most likely dominated discussions in social studies' classes. But for 45 Westboro Junior High School students, 1775 was only important if it translated into 17 1/4 on the "big board."

As part of a study of the stock market, youngsters in two of Bill Lynch's eighth grade classes chose to become Data General stockholders. The experience helped them learn and earn.

Buying in at about 24 early in April, the classes sold their four shares in June at 33 1/4. After deducting brokerage fees, each class member recorded a net gain of about 15¢ on a \$1 investment.

"The purpose of social studies is to give an exposure to all disciplines," noted Bill. "This includes environment, culture, group behavior, politics and economics."

Economics for eighth graders includes basic principles of the marketplace (supply and demand) and consumer education (saving, borrowing and investing). It was in discussing investments that the class interest developed in the stock market.

"The students found," said Bill, "that there's a segment of society that would rather take a chance by investing their money and getting a higher return."

Choosing

Students began their stock market study by learning to read the daily stock listings. They graduated to business publications (BARON'S, FORBES etc.) and mixed in general reading like BUSINESS WEEK and U.S. NEWS AND WORLD REPORT. When it was time to pick a stock, they narrowed the field to computer, minicomputer and cash register companies.

Due to the short term of the project, the students were looking for a rapid growth stock as they examined 10 final possibilities through company reports and literature. The decision was made to go with Data General.

Visit

Though no longer stockholders on June 16, the students were hosted by Data General for a presentation about the company and a tour of manufacturing facilities. Hopefully, what they viewed, combined with their successful stock purchase, helped to reinforce their initial investigation which led them to Data General.

Language Class Is Lesson In Culture

Twelve Data General employees from manufacturing, personnel and training at Southboro learned more than Portuguese words and phrases during a recently completed 20 session/40 hour language course.

"The biggest thing I learned was not the language," relates Larry Bliss, a plating area supervisor. "The cultural part of it was the best. I better understand the people and their culture."

De De Pearse of personnel agreed. "It's more than just learning the language."

The cultural background and the language instruction combined are

helpful to Mary O'Reilly, a manufacturing supervisor. "It breaks the ice between me and my people, by my stumbling over Portuguese words."

Instructor Dennis Frias, a teacher in the Hudson school system, literally gave his class a taste of the culture at the final session as he served a Portuguese supper.

In addition to Larry, De De and Mary, students were John Barrett, Norm Ross, Chuck Caron, Mike Lemieux, Dennis O'Brien, Don Oppenheim and Roy Tewell from manufacturing, Lois Manza from training and Gerry Callanan from personnel.



"I say it, you write it." Instructor Dennis Frias quizzes his students in the Portuguese language course which was successfully completed by 12 Data General employees at Southboro.

National Computer Conference - A Total Success For Data General

Data General performed superbly at the National Computer Conference last month at Anaheim, California. Now the sales force is doing its job following up on nearly 1,000 inquiries received from among the 34,000 people who attended the four day show.

For the computer customer looking for what's new, Data General had its ECLIPSE C/300 commercial system in its first public demonstration. The reliability of the system combined with the care given by field service engineer Bob Jensen kept the system fully operational for nearly 35 hours of show time.

The visitor looking for a company with confidence found it at booth 1335. Data General challenged all manufacturers at the conference, especially those with medium and large machines, to pit their systems against ECLIPSE™ in a series of six programs developed by neutral parties to test a wide variety of capabilities. No one accepted the challenge.

Coordinator Ken Price pointed out that such success at a show is a payoff for all Data General employees who were called on to provide extra effort to meet deadlines. In addition to the obvious mechanical setup and

programming, the ECLIPSE blue and white booth was an eye catcher. The new ECLIPSE C/300 literature and the reprints of other promotional pieces totaled nearly 50,000 and were fully distributed. The demonstrated uses of the systems were appealing.

INFOS™

The ECLIPSE C/300 system allowed visitors to access a large, on-line data base oriented file management system through CRT terminals. Utilized was Dun & Bradstreet's field of corporate families, a well-known national accounts file on 2,275 large US corporations at over 120,000

locations. The system demonstrated the INFOS software system's ability to make inquiries into the data base, retrieve data and make selective reports interactively.

BENCHMARKS

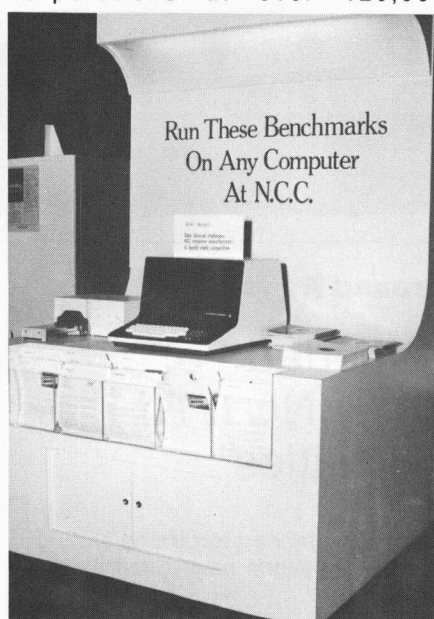
Frank Rowe, director of product marketing for Data General, made the rounds at the show issuing the challenge to manufacturers displaying larger systems to run against ECLIPSE in the series of benchmarks.

"The trend in this industry is toward more powerful small computers," said Frank "and we especially wanted to hear from the medium to larger computer systems exhibitors. I think if some manufacturers had run our benchmark series on their larger machines, we would have surprised a lot of people with the results."

Among the companies Frank approached were Modular Computer, Interdata, IBM, Xerox and Hewlett Packard.



Lots of lookers . . . but no takers! A highlight of Data General's fully operative display at the NCC, the Benchmark challenge caused much discussion but found no company willing to take on ECLIPSE.



Marketing's Frank Madren (center) talks with a potential customer.



Visitors to NCC were able to test the data base capabilities of ECLIPSE C/300 and INFOS by seeking information from the corporate select file of Dun & Bradstreet.



Fielding questions on the interactive systems is Data General's Art Lynch (center).



Vice President Herb Richman (left) and Frank Rowe (right) director of product marketing, stand ready to answer questions at NCC.

EPA Eliminates Forced Carpooling

The federal Environmental Protection Agency has issued a revised plan for attempting to achieve cleaner air through less traffic in the 102 community greater Boston area encircled by Rte 495 and including Southboro.

The new plan relies on good faith efforts of employers to encourage and assist employees in forming carpools and using mass transit. It eliminates

earlier provisions that would have required employers to mandate carpooling in order to reduce the number of single occupant cars by 25 percent.

As guidelines for implementing the latest plan become more defined, Data General will be assessing its responsibilities. However, many of the provisions deal with greater utilization of mass transit which obviously apply to industries closer to the city of Boston. Route 495, just a few hundred feet from Data General's Southboro plant, is at the outer edge of the Metropolitan Boston Intrastate Region.

Computers Need More Than Good Technology

Would the greatest piece of technology sell if packaged in an unattractive black box? Maybe yes, maybe no! But no one is about to market a black box in order to answer the question.

What would user reaction be to a computer in which switches moved only counter clockwise? It would, at the very least, cause an adjustment problem.

It's an accepted fact that products must not only perform a needed function but must do so in a fashion that's both convenient and pleasing to people. In the world of Data General's computers, Jack Carroll mixes art and engineering to come up with designs that give the product a unique identity while taking human factors into consideration.

ECLIPSE

The contributions of industrial design can easily be seen in the clean, attractive lines of ECLIPSE. With the ECLIPSE, blue arrived as an identifying color for Data General computers and peripheral equipment. A longer look at the cabinetry, however, discloses other significant changes.

"Traditional NOVA® style equipment had a building block appearance," states Jack. "Each individual piece of equipment had a picture frame front panel and could be stacked one on top of another or as an individual piece of equipment. This system was sufficient for these traditional applications. But, when the system expanded to two or more cabinets, it resulted in a helter-skelter appearance due to various heights of individual pieces of equipment not in line from cabinet to cabinet. So when designing the new ECLIPSE, the picture frames were discarded. A single white trim line around the various pieces of equipment was adapted, a dark blue chosen to minimize the visual horizontal break lines and a total system appearance created."

"With ECLIPSE," continued Jack, "we are selling to more end users, so it was important to design a cabinet that could attractively hold components of varying sizes yet look like a complete system of subsystem components."

The importance of product identity is attested to in that designs just like electronic configurations are patented. The lines and sculpture form create an identity. "Our products all look as though they come from the same company," states Jack. "And, that's important."

INSIDE STORY

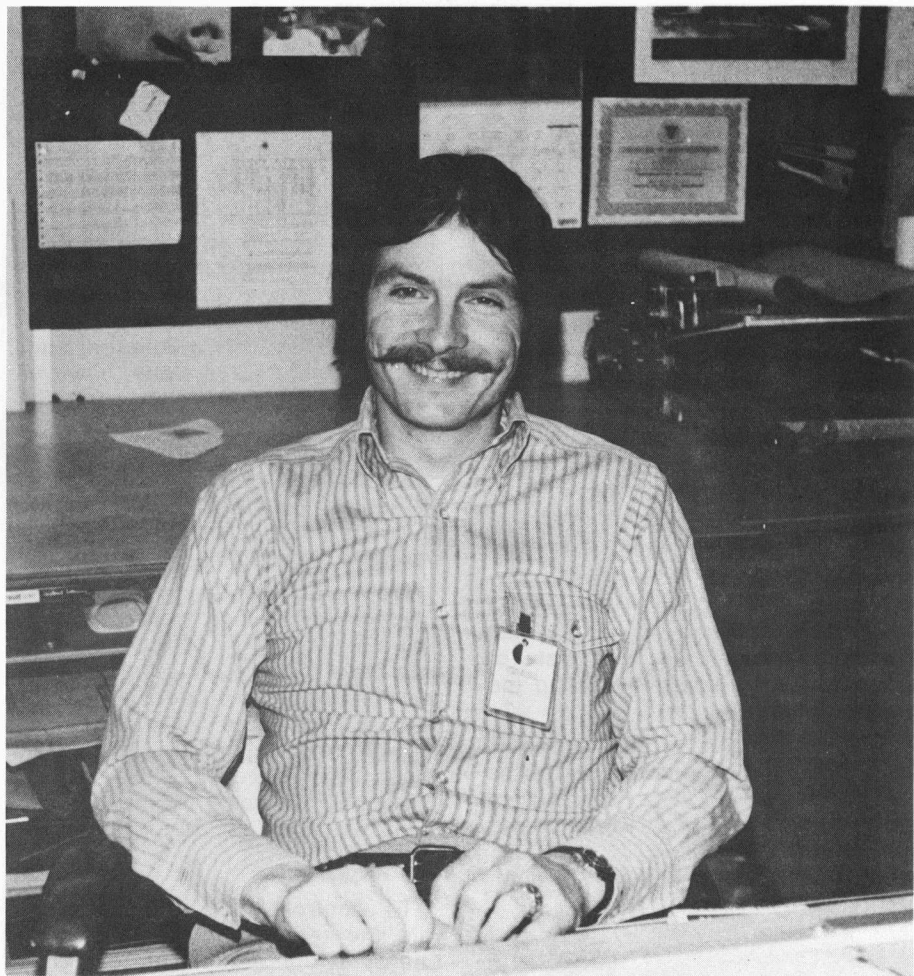
Color and cabinet lines, of course, are final considerations. Long before this, more basic questions must be faced. How will the mechanics of the computer match up with the console hardware? Choice of switches, lights and controls is made on the basis of what they'll be used for and where they'll be located. In designing a cabinet and a console, prime consideration must be given to the user. Much planning goes into determining how a unit will be used and where it will be located most often.

Inputs on design are received first in sessions with mechanical and electrical design engineers. Using the basic knowledge now at hand, conceptual sketches are completed. Next come more detailed line drawings and then models. When the project is ready for management review, variations on the model have been produced and cost estimates generated.

CHALLENGE

Data General's supermarket system is one of the most challenging jobs in industrial design. It starts with considering two users — the store employee and the customer.

Check-out equipment must provide easy access for the cashier — everything within arm's reach. The customer wants to see what's happening and this is considered.



Jack Carroll

Jack and Dennis Stead are working on the supermarket project and have spent time observing the prototype system in use at Stoughton, Ma. They've taken note of both customer and cashier reaction. They've logged feedback from field people. And, all comments are evaluated in the design.

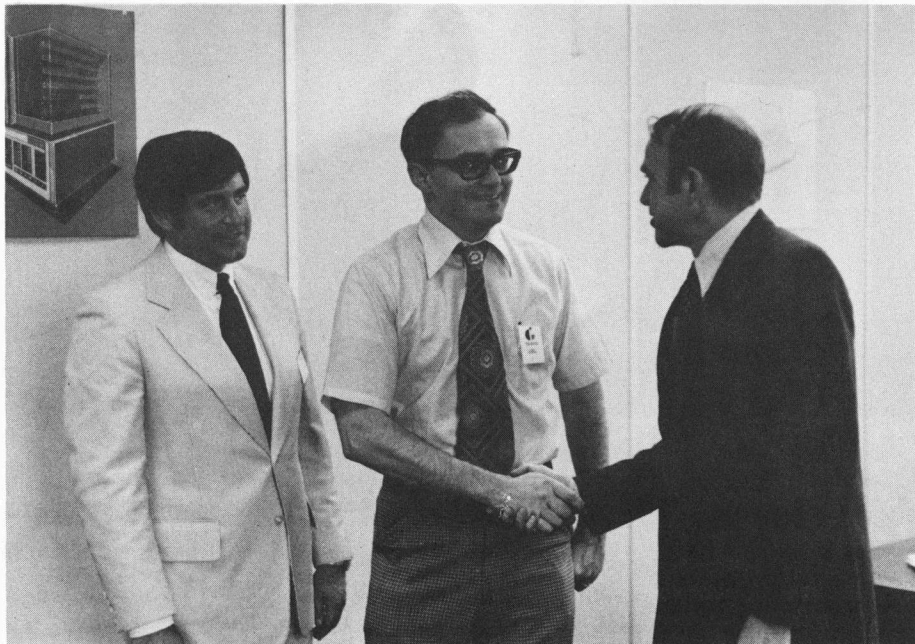
Again, color plays a part in the design. To blend with differing store decors, basic colors of ECLIPSE white and NOVA gray were chosen. Dashes of color were added on the register keyboard.

"These gold, yellow and lime keys did create a minor problem" notes Jack. "When cashiers were not looking, some young children, attracted to the color, would punch the keys."

ARTISTIC

Jack has a fine arts, industrial product design and automotive design background from several schools including The Art Center — Los Angeles, Arts and Crafts — Detroit and Northeastern.

While this work at Data Control all sounds scientific and formal, the job performed by Jack is still very artistic in nature. The artist's instinct surfaced when Jack was asked why blue for ECLIPSE. Expecting a dissertation on the value of the color in creating certain moods, blending with certain decors etc., you're surprised with the answer — "We just liked it, and most people like it."



Data General President Ed de Castro welcomes Massachusetts Manpower Affairs Secretary Howard Smith to the company's Southboro headquarters. Ed, Secretary Smith and John Marino, the new commissioner of Commerce and Development (left), held a discussion on Data General's success in Massachusetts and its future growth plans.

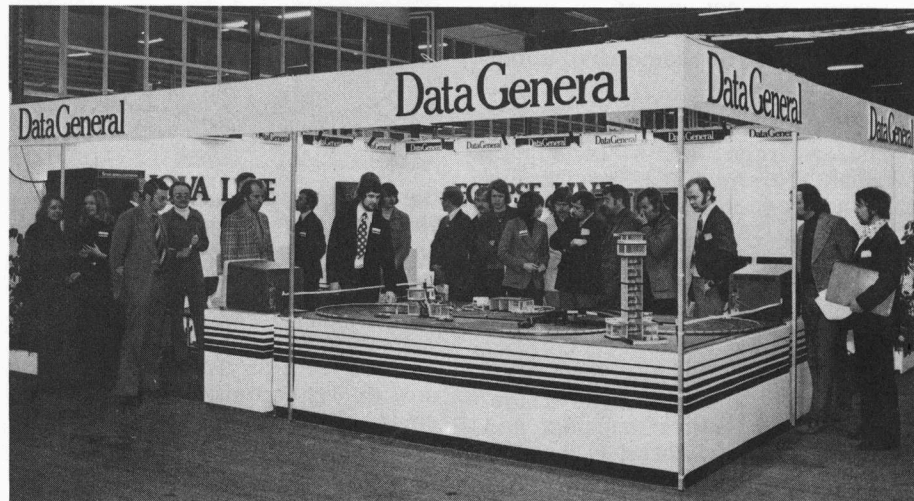
Later in an address to the Worcester Chamber of Commerce, Smith urged efforts to attract new business but also stated: "We should concentrate on making business easier and more productive for the individual manufacturer already here. Public officials . . . must cooperate to this end."

Computermusic At German Show

Computermusic, produced and played without the help of traditional audio systems, highlighted the Data General display at the Hanover Fair in Germany in April. Tickling the ivories of the ECLIPSE C/300 console was Wolfgang Bier, originator of the musical program and a system analyst for Data General.

A visitor to the display was able to select programmed melodies by simply communicating through the display keyboard of the ECLIPSE. In perfect harmony, Data General's standard computer and peripherals produced music within a five octave range. The repertoire consisted of five software packages which convert oscillator pitches into audible signals.

Someday, such developments may move a future Irving Berlin to compose "Strike Up The Eclipse."



SOPHISTICATED GAMES DEMONSTRATE ECLIPSE AT STOCKHOLM — The Eclipse C/300 put on its first public show in Scandinavia in late April at the Instruments and Measurement Techniques Fair which attracted 25,000 visitors. The model racing car track interestingly demonstrated the process control capabilities of NOVA 2/10 and successfully attracted potential customers to the Data General booth.



SING-ALONG WITH ECLIPSE — That's right, ECLIPSE is making music! Data General Systems Analyst Wolfgang Bier of Bad Soden, Germany originated the musical program which was presented for all to hear during the Hanover Fair in April.

Energy Conservation As Important As Ever

Why should you help conserve energy at Data General?

If you're concerned about total energy use, you should know that per capita consumption on the job is far greater than consumption at home.

If you understand it best in dollars and cents, you should know that electricity and natural gas represented an expense of more than \$600,000 on the Southboro site in 1974 and there's no sign of a price moderation.

Dennis Coco, who joined Data General at the beginning of the last heating season, has the task of tracking energy use and tackling the consumption problem.

"We've got to have all the people with us," says Dennis as he discusses the difficulty in making a conservation program work unless people understand.

Electric heaters to supplement the gas hot air heating systems have been a "tradition" on the Southboro site. Many have questioned the strong move to eliminate such heaters. Cost figures alone, however, could justify the move. It costs five times more to produce heat from electricity than from gas. On Data General's rate schedules, \$1.80 worth of natural gas produces a million BTUs of heat. A similar amount of warmth from electricity costs \$9.37.

From an energy viewpoint, is there a reason for wanting to do away with private coffee pots? Dennis calculates that a 24 cup coffee warmer operating 8 hours a day, five days a week uses more than 1000 kilowatt hours a year, representing about \$34 in expense. That's enough to supply your home for more than a month.

The Program

To control costs and cooperate with the requests from the Federal Energy Commission to conserve, Data General has undertaken several projects aimed at reducing consumption. The obvious included the newly accepted temperatures for heating and cooling buildings and the darkening of more than a hundred excess light fixtures.

The not so obvious are also big energy savers. Hot water on the Southboro site flows at just 110 degrees fahrenheit instead of 140 degrees. "It's a matter of using straight hot water for washing instead of heating it up and then mixing it with cold water to cool it down," says Dennis.



Dennis Coco: "... when you're being nickeled and dimed to death, the only way to get it back is in nickels and dimes."

Parking lot lights have been placed on time control. They now function only during hours when Data Control employees are on the property.

Large air compressors in Building 5 will be given backup units one-tenth the size to provide the necessary air for limited operations during off-hours.

High powered exhaust fans in plating areas will be augmented by low powered fans that create sufficient air movement during non-working hours.

Maintenance is also a big factor in energy conservation. All heating and ventilating units are being serviced more frequently to assure proper operation. Doors and windows have been weather stripped and caulked. Insulation has been added in some wall and ceiling areas. Replacement of florescent lamps has been placed on schedule to assure removal before "burn out".

Looking Ahead

Energy conservation will move ahead with additional individual actions by facilities and operating people. But the commitment of everyone will contribute to significant progress.

"We've all got to change our habits a bit," notes Dennis. "We have to adapt ourselves and our clothing to lower winter temperatures and higher summer temperatures. What we're getting used to now has been the rule for years in most European countries."

Accountability in the use of energy is a main goal in any conservation program. "It is difficult to get support when you can't show a manager exactly where energy is being

consumed," says Dennis. "As we develop information, I'm sure projects will be undertaken, especially in the manufacturing areas, that will produce substantial results."

"Many people think whatever they do will save very little on the half-million dollar electric bill," says Dennis. "But, when you're being nickeled and dimed to death, the only way to get it back is in nickels and dimes."

Do You Have A Bright Idea To Save Energy?

If your suggestion could be implemented by the facilities people at Southboro or Westboro, call Dennis Coco at extension 2666. Let him know what ideas you're generating. At other locations, consult your supervisor.

If things are being accomplished in your area to conserve energy let INTERFACE know at extension 2733, so we can put them in the spotlight.

If you have any thoughts on energy conservation at work or at home, let's hear from you!

Profile

Bob Keer — In Sales and Sails



Skipper Bob Keer (right foreground) guides the tiller and he and his crew sail Botany Bay, the birthplace of Australia where Captain Cook made the first landing in Australia.

Bob Keers, sales engineer in the Sydney offices of Data General Australia Pty. Ltd., spends most of his spare time with the George's River 16 ft. Sailing Club both as a sailor and as a director.

Bob is currently the vice-commadore of the club after previously serving as rear-commadore.

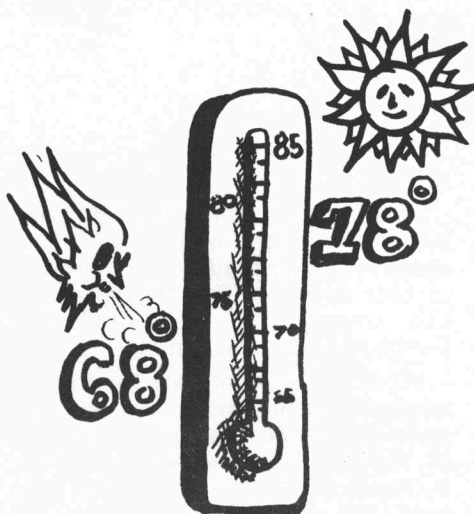
The George's River flows through the southern suburban area of Sydney into Botany Bay and is one of several broad waterways that make boating an exceptionally popular sport in the harbour city.

Now in his early 30's, Bob has been sailing skiffs since he was 12 when he crewed with his father, who has been Commodore of the Maryborough Sailing Club in Queensland since 1955.

Bob sailed several seasons with the Brisbane Skiff Club while attending the University of Queensland where he graduated with a Bachelor of Science degree.

He has been sailing on the George's River since 1965 but each Easter returns to Maryborough, about 800 miles north of Sydney, to take part in a regatta on Hervey Bay.

Bob services a large number of end-users in the Sydney Metropolitan area.

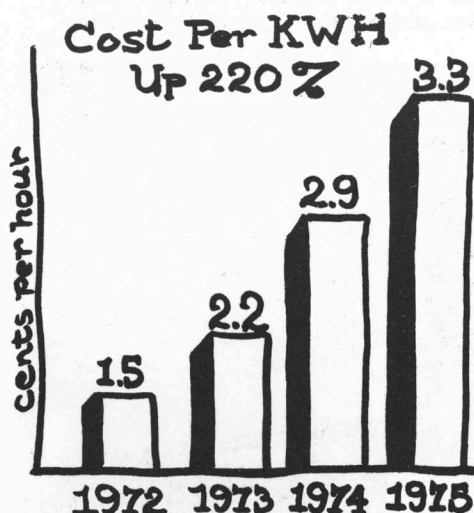


Understanding starts with acceptance of a little discomfort — 68 degrees in the winter and 78 degrees in the summer. It continues with a consciousness that drives us to flip switches off when lights and machines are not in use. It grows when we seek out energy waste situations and do something about them.

The Culprit

The average home consumes between 300 and 600 kilowatt hours of electricity each month, exclusive of any heating. This compares to more than 19 million kilowatt hours of electricity used by Data General in 1974 at its Southboro and Westboro facilities.

From a cost viewpoint, while rates may vary depending on total usage, the fuel adjustment is constant and causes a rapid escalation in the bills of industrial users. DG's average cost per kilowatt hour was 2.9 cents in 1974 resulting in a total cost in excess of \$500,000. Less than two years earlier, the average kilowatt hour cost only 1.5 cents.



INTERFACE

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